### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

70.28 File #:

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002378 Address: 333 Burma Road **Date Inspected:** 26-Mar-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 830 **Project Name:** SAS Superstructure **OSM Departure Time:** 1930 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muroran, Japan

**CWI Name:** Chung Kuan and MaKhmud AshadWI Present: Yes No

**Inspected CWI report:** Yes **Rod Oven in Use:** Yes No N/A No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A

**Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** PQR test plate

#### **Summary of Items Observed:**

Witness Procedure Qualification Record (PQR) qualification test (SW-5-2): Caltrans Quality Assurance Inspector (QAI) representative Mr. Wai Pau, travel to Japan Steel Works (JSW) Muroran plant to witness an AWS D1.5 standard PQR qualification welding test. The number of PQR qualification welding test is SJ-2942-WP-8 (test plate SW-5-2). The PQR qualification test utilizing Shielded Metal Arc Welding (SMAW) was conducted by welder Mr. Kouzou Kobayashi (08-5023) performed in the vertical position (3G). with set the electrode at a10 degree angle above horizontal line when the welder strike with the short arc method and lift the electrode up. The material used for the POR qualification test specimens was reported by JSW Welding Engineer Mr. Takaaki Maruya as ASTM A709-HPS-485WT (plate to plate) having a wall thickness measurement of 50mm. The weld joint design used butt joint, single-V-groove weld with 20mm x 75mm backing bar. The filler metal used in the test is Hoballoy 9018-M with 5mm diameter electrode, made by Hobart Brothers, USA. The SMAW welding and parameters have been monitored and recorded by CWI inspectors Mr. Chung Kuan, Mr. MaKhmud Ashadi and JSW Welding Engineer Mr. Takaaki Maruya, and were also observed by Caltrans QAI. A total of eleven interior filler weld passes (#22 to #33) were completed on this date. The preheat temperature of the test plate is to be held at 120 C overnight for the continuation of the welding at tomorrow. Based on Caltrans QA observation, no discrepancies were noted.

### **Summary of Conversations:**

As Note within the report above.

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer (858)697-6363, who represents the Office of Structural Materials

# WELDING INSPECTION REPORT

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for your project.

**Inspected By:** Pau,Wai Quality Assurance Inspector

**Reviewed By:** Brasel,Ron QA Reviewer